

Work Order ID 133097

Tuesday, May 26, 2015 12:44:04 PM

133097

Page 1

Item ID: D3262-041 Accept ***N19000040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Canister Assembly
 Start Date: 5/26/15 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 5/26/15 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: MJS Date: MAY 26 2015 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3262	Rev F								

100 Weld per dwg A/R Aluminum rod Batch: 41182377 0.00
 Large Fab
100
 Large Fab Memo 0.01
 Large Fab Weld canister assembly as per Dwg D3262 using DT8739 to align fillings

1 EL 15-6-10

110 QC9- Inspect visual per QSI004- Fusion Welds 0.00
110
 QC Memo 0.00
 Quality Control

① 150617 DAS
9
9-89

120 QC5- Inspect part completeness to step on W/O 0.00
120
 QC Memo 0.00
 Quality Control Pressure test as per Dwg D3262

① 150617 DAS
9
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																																												
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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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OTHER : ☐																					

133097

Page 3

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 5/26/15 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 5/26/15 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Operation Description

Set Up/ Run Hours

Tool ID**Tool #****Plan
Code**Accept
QtyReject
QtyReject
Number

**Insp.
Stamp**

160

Identify as per dwg & Stock Location:_____

0.00

160

Packaging

Memo

PPP 133 Mo 0.00

0.00

Packaging

1
JUN 18 2015

170

QC21- Final Inspection - Work Order Release

0.00

170

QC

Memo

0.00

Quality Control

MC5 JUN 18 2015

MLJ JUN 18 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Tuesday, May 26, 2015 12:44:04 PM

133097

D3262-041

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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1

Q 15-B-10

Loc Code

2

2

Q 15-6-10

Loc Code

10

4

123704

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

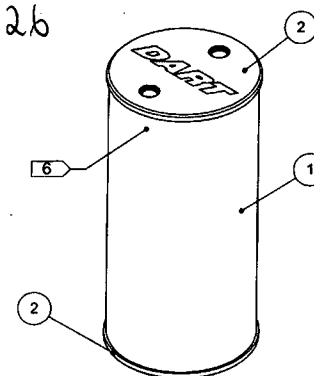
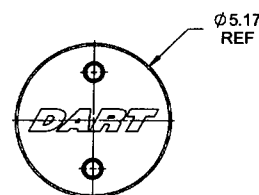
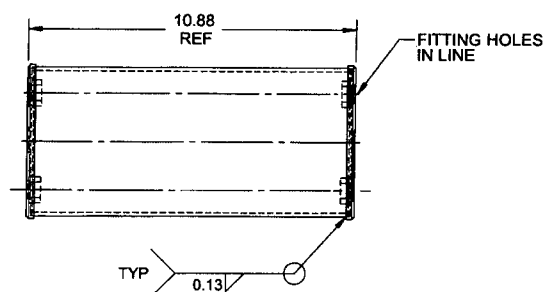
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Root Cause <table style="width:100%; border: none;"> <tr> <td style="border: none;">Environment ☐</td> <td style="border: none;">No Re-verification ☐</td> <td style="border: none;">Pressure/Forced ☐</td> <td style="border: none;">Temperature/Cure ☐</td> <td style="border: none;">Power Loss/Surge ☐</td> <td style="border: none;">Positioned Wrong ☐</td> </tr> <tr> <td style="border: none;">Design ☐</td> <td style="border: none;">Operator ☐</td> <td style="border: none;">Bending ☐</td> <td style="border: none;">Set-up ☐</td> <td style="border: none;">Folio/Program ☐</td> <td style="border: none;">Outside Dimensions ☐</td> </tr> <tr> <td style="border: none;">Doc/Data ☐</td> <td style="border: none;">Offset/Setup ☐</td> <td style="border: none;">Centre Not Concentric ☐</td> <td style="border: none;">BOM/Route ☐</td> <td style="border: none;">Grain ☐</td> <td style="border: none;">Over/Under tolerance ☐</td> </tr> <tr> <td style="border: none;">Equip/Tooling ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;">Cracks ☐</td> <td style="border: none;">Broken/Damage/Defect ☐</td> <td style="border: none;">Weld ☐</td> <td style="border: none;">Part Incorrect ☐</td> </tr> <tr> <td style="border: none;">Handling/Pre ☐</td> <td style="border: none;">Training ☐</td> <td style="border: none;">Crimp/Kink/Ripple/Wave ☐</td> <td style="border: none;">Inspection Incomplete/Unqualified ☐</td> <td style="border: none;">Wrong Stock Pulled ☐</td> <td style="border: none;">Part Lost/Missing ☐</td> </tr> <tr> <td style="border: none;">Material ☐</td> <td style="border: none;">Use for Testing ☐</td> <td style="border: none;">Cuffs ☐</td> <td style="border: none;">Contamination ☐</td> <td style="border: none;">Out of Sequence ☐</td> <td style="border: none;">Part Moved ☐</td> </tr> <tr> <td style="border: none;">Internal Transport ☐</td> <td style="border: none;">Poor Information ☐</td> <td style="border: none;">Crushing ☐</td> <td style="border: none;">Countersink ☐</td> <td style="border: none;">Off-set ☐</td> <td style="border: none;">Drawing ☐</td> </tr> <tr> <td style="border: none;">Tribal Knowledge ☐</td> <td style="border: none;">Rushing ☐</td> <td style="border: none;">Heat Treat ☐</td> <td style="border: none;">Cut Too Short ☐</td> <td style="border: none;">Mislabeled ☐</td> <td style="border: none;">Finish ☐</td> </tr> <tr> <td style="border: none;">LOA ☐</td> <td style="border: none;">Product Improvement ☐</td> <td style="border: none;">Wave/Twist in Tube ☐</td> <td style="border: none;">Instructions Incomplete/Unclear ☐</td> <td style="border: none;">Fit/Function ☐</td> <td style="border: none;">Misread ☐</td> </tr> <tr> <td style="border: none;">Substation ☐</td> <td style="border: none;">Process Improvement ☐</td> <td style="border: none;">Marks/Chatter ☐</td> <td style="border: none;">Drill Holes ☐</td> <td style="border: none;">Misaligned/off center ☐</td> <td style="border: none;">Turning Sequence ☐</td> </tr> <tr> <td style="border: none;">Past Expiry Date ☐</td> <td style="border: none;">Manufacturing Process ☐</td> <td colspan="4"></td> </tr> <tr> <td style="border: none;">Misidentified ☐</td> <td style="border: none;">Past Due ☐</td> <td colspan="4"></td> </tr> </table>			Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐					Misidentified ☐	Past Due ☐					FAULT CATEGORY OTHER : ☐		
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ITEM	QTY	P/N	DESCRIPTION
	X	D3262-041	CANISTER ASSEMBLY
1	1	D3262-1	TUBE
2	2	D3262-3	CAP

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 133097 MW
15-05-26



RELEASED
2014-07-15
JMT

D3262-041 CANISTER ASSEMBLY

NOTES:

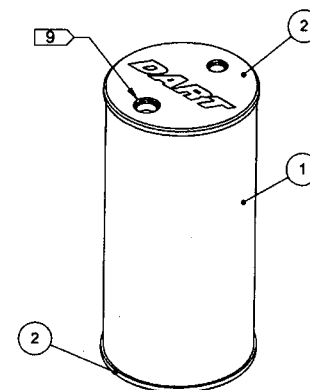
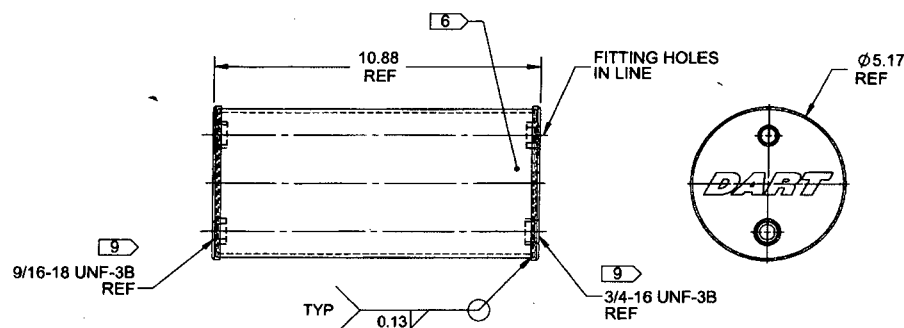
- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER QSI 005 4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 2.51 lbs
- 8) LIQUID PENETRANT INSPECT PER ASTM E1417 LEVEL 1 OR
PRESSURIZE TO 10 psi AND SUBMERGE UNDER WATER TO CHECK FOR LEAKS

F	THREAD CLASS 2B WAS 3B (ZN C3-4, B4-5, D4-5)	RF	14.06.26
E	0.25 WAS 0.45 (ZN C7-4, C7-5); 0.13 WAS 0.33 (ZN B7-4, B7-5); ADD DIMENSION (ZN B1-4, D1-5, B1-5)	RF	10.05.03
D	ADD D3262-043/-5 (ZN B5-2, B5-5); REVISE DIMENSIONS TO EQUAL TOOL DIMENSIONS (ZN B2-4; C2-4) PER CAR 09-004	RF	09.12.30
C	Ø 5.165 WAS Ø 5.190	RF	06.08.31
B	ADD PRESSURE TESTING OPTION	MB	05.02.14
A	NEW ISSUE	RF	04.05.06
REV.	DESCRIPTION	BY	DATE

APPROVED

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	VS	DRAWING NO.	REV. F
MFG. APPR.	JLM	D3262	SHEET 1 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	FUEL PURGE CANISTER	NTS
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ITEM	QTY -043	P/N	DESCRIPTION
	X	D3262-043	CANISTER ASSEMBLY
1	1	D3262-1	TUBE
2	2	D3262-5	CAP



D3262-043 CANISTER ASSEMBLY

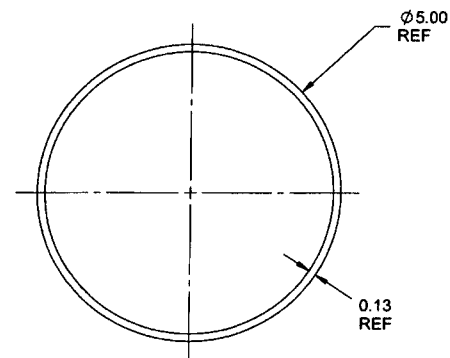
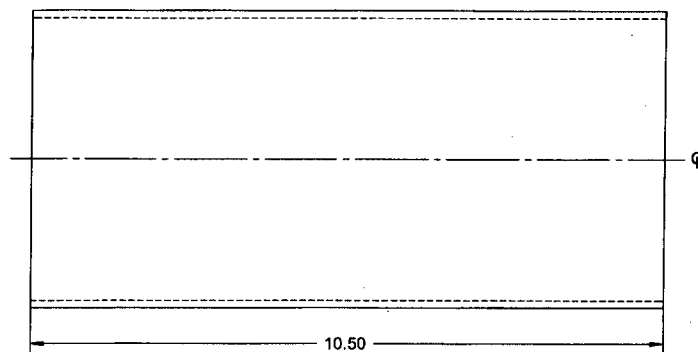
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER QSI 005 4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 2.50 lbs
- 8) LIQUID PENETRANT INSPECT PER ASTM E1417 LEVEL 1 OR
PRESSURIZE TO 10 psi AND SUBMERGE UNDER WATER TO CHECK FOR LEAKS
- 9) WELD CAPS WITH 3/4-16 TAP TOP HOLE IN LINE WITH 9/16-18 TAP BOTTOM HOLE

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DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	VS	DRAWING NO.	REV. F
MFG. APPR.	JLM	D3262	SHEET 2 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	FUEL PURGE CANISTER	NTS
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D3262-1 TUBE

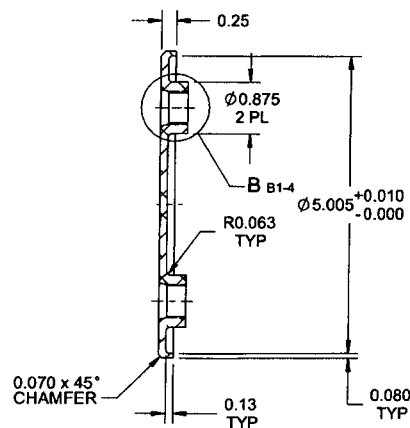
NOTES:

- 1) MATERIAL: 6061-T6 OR 6061-T62 ALUMINUM TUBING, 5.00 OD x 0.125 WALL
PER WW-T-700/6 OR AMS 4080 OR AMS 4082 OR QQ-A-200/8 OR QQ-A-225/8
REF. DART SPEC. M6061T6T5.000W.125
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.96 lbs
- 8) PART IS SYMMETRICAL ABOUT CENTERLINE

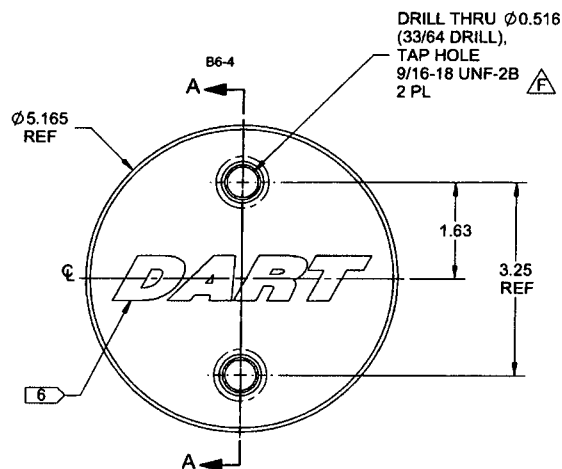
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DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	VS	DRAWING NO. D3262	REV. F
MFG. APPR.	JLM	SHEET 3 OF 5	
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	FUEL PURGE CANISTER	NTS
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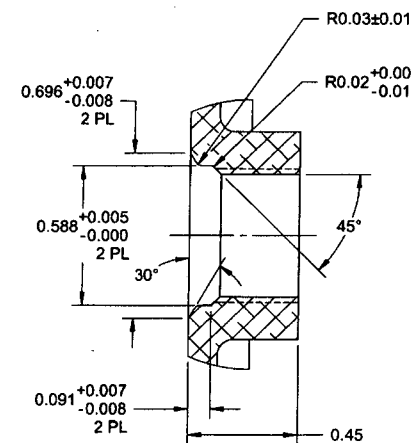
RELEASED
2014-07-15
md



SECTION A-A C5-4



D3262-3 CAP



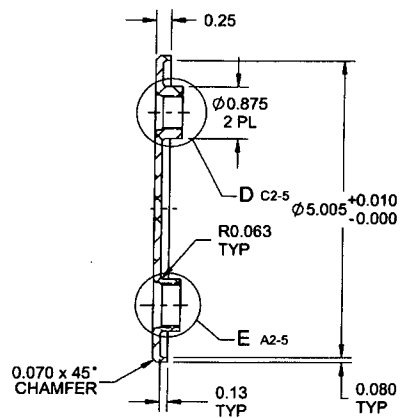
DETAIL B C7-4
SCALE 2X

NOTES:

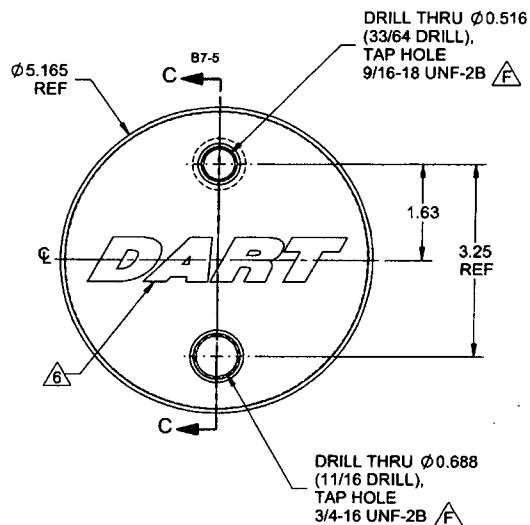
- 1) MATERIAL: 6061-T6/T651 ALUMINUM BAR
PER QQ-A-200/8 OR QQ-A-225/8
REF. DART SPEC. M6061T6B
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE 'DART' LOGO AS SHOWN USING 0.75 HIGH x 0.010 DEEP
(MAX) LETTERS WITH TOOL RADIUS OF 0.25 MIN
- 7) WEIGHT: 0.28 lbs
- 8) PART IS SYMMETRICAL ABOUT CENTERLINE

APPROVED	DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
	DRAWN	RF		
	CHECKED	VS	DRAWING NO.	REV. F
	MFG. APPR.	JLM	D3262	SHEET 4 OF 5
	APPROVED	HS	TITLE	SCALE
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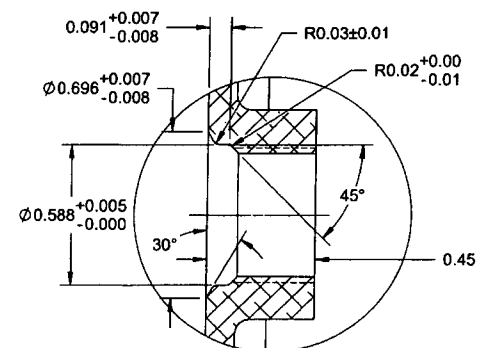
RELEASE
2014-07-15



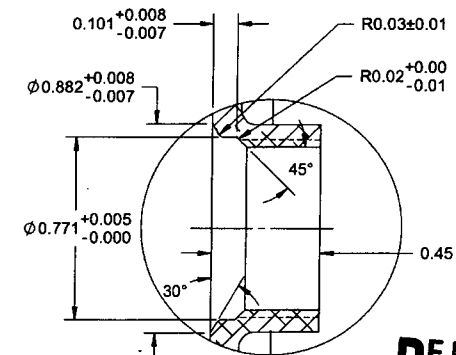
SECTION C-C D5-5



D3262-5 CAP



DETAIL D C7-5
SCALE 2X



DETAIL E B7-5
SCALE 2X

NOTES:

- 1) MATERIAL: 6061-T6/T651 ALUMINUM BAR
PER QQ-A-200/8 OR QQ-A-225/8
REF. DART SPEC. M6061T6B
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE 'DART' LOGO AS SHOWN USING 0.75 HIGH x 0.010 DEEP
(MAX) LETTERS WITH TOOL RADIUS OF 0.25 MIN
- 7) WEIGHT: 0.27 lbs

APPROVED

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	VS	DRAWING NO.	REV. F
MFG. APPR.	JLM	D3262	SHEET 5 OF 6
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	FUEL PURGE CANISTER	NTS
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